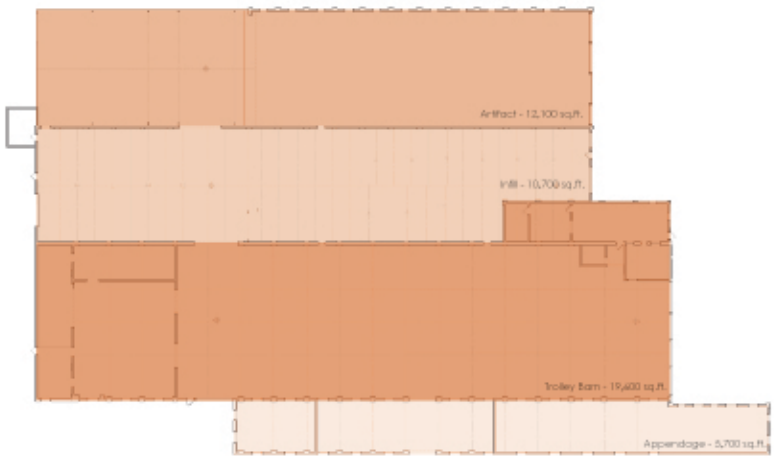
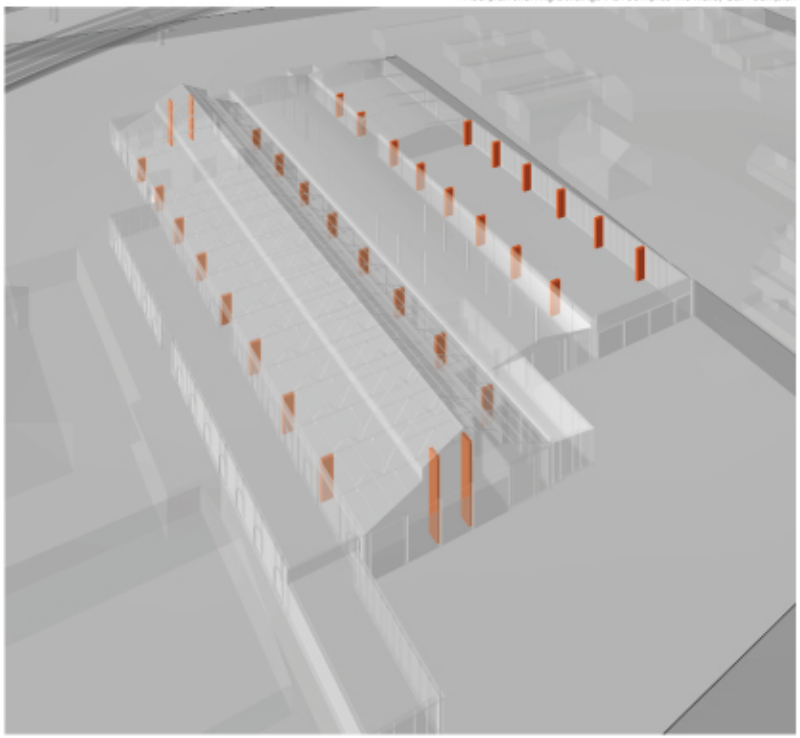
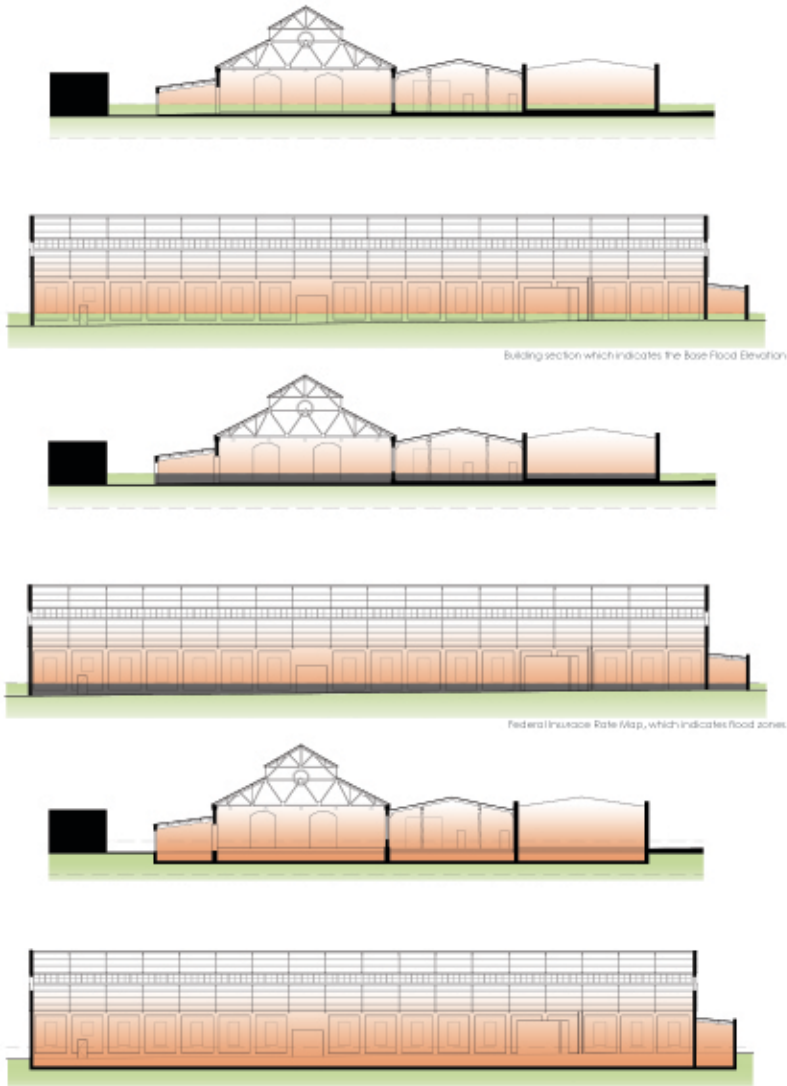


Floorplan showing buildings that comprise the Trolley Barn complex



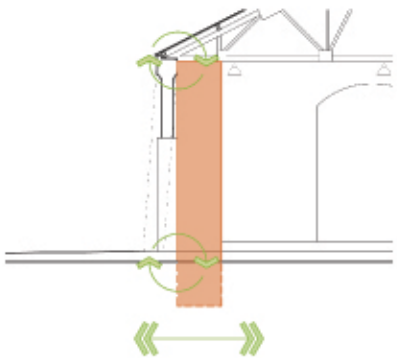
Perspective indicating location of required structural buttresses



Building section which indicates the Base Flood Elevation

Federal Insurace Rate Map, which indicates flood zones

FEMA uplift options: raise floor above BFE



Structural diagram illustrating seismic forces

FEMA uplift options: lower floor of accomodate a mezzanine level

Building Issues:

For the Trolley Barn to be safe for future users, it will need to be upgraded to meet modern building codes

To be safe, the Trolley Barn should be brought up to the standards of modern building codes. For planning purposes, the most signifigant of these are earhtquake resistance and flooding.

Structural

•To resist the forces induced by a mild earthquake, **structural buttresses** should be constructed along the exterior walls of the Trolley Barn and Artifact.

•**Additional bracing** would be required in the Tolley Barn's trusses, especially at each end.

FEMA

•Sitting in an **AE-13** zone, the property's base flood elevation (BFE) is **13'-0" above mean sea level**. Elevations below the BFE are subject to a 1% annual chance of flooding; 26% over 30 years.

•If the **renovation costs exceed 50% of its vlaue**, the Trolley Barn would have to meet modern FEMA regulations.

•FEMA options include:

>**seek a variance** justified by the buildings historic status and accept athe occasional flood damage and increased insurance premiums

>**raise the floor** to the base flood elevation

>**floodproof inside** the building; or

>**floodproof outside** the building and **lower the floor** to allow for a full grade level development plus mezzanine.